

# Interview Summary

Application No.

09/496,506

Applicant(s)

NAYFEH ET AL.

Examiner

Sara W. Crane

Art Unit

2811

All participants (applicant, applicant's representative, PTO personnel):

(1) Sara W. Crane.

(3) \_\_\_\_\_.

(2) Arik Ransom, for Applicant.

(4) \_\_\_\_\_.

Date of Interview: 10 September 2002.

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☐ No.

If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 1.

Identification of prior art discussed: Chen et al..

Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

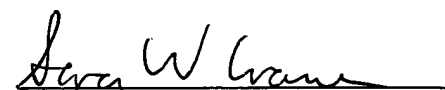
Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

i) ☒ It is not necessary for applicant to provide a separate record of the substance of the interview(if box is checked).

Unless the paragraph above has been checked, THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

  
Examiner's signature, if required

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: With respect to the rejection of claim 4 under 35 U.S.C. 112, second paragraph, the Applicant intends the claim to mean that the carrier energy levels of each nanoparticle exhibit an energy spacing of approximately 1 eV. (The language of claim 4 is not intended to refer to energy level spacings between one nanoparticle and an adjacent nanoparticle.) With respect to the rejection based on the Chen reference, Applicant argues that the Chen quantum dot of column 4, line 55, would have a diameter significantly larger than the specified 1 nm thickness. The examiner believes that a quantum "dot" would be understood by one of ordinary skill as being dot-shaped, having approximately the same diameter as thickness. Applicant also argues that one of ordinary skill could not make 1 nm diameter silicon nanoparticles without reference to Applicant's specification. There is no evidence to support this claim in the specification. The examiner did a quick search and found at least two references that teach 1 nm diameter silicon nanoparticles (U.S. patent no. 6,407,424, column 4, line 65, and U.S. patent no. 5,703,896, column 5, line 6). Each of these references teaches how to make such nanoparticles, so the examiner believes that one of ordinary skill could have made a 1 nm diameter nanoparticle without reference to Applicant's teaching.